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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,684	08/25/2003	Thomas J. Kelly	08350.3304-02	9971

58982   7590   08/23/2007
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WASHINGTON, DC 20001-4413

EXAMINER
SIDDIQI, MOHAMMAD A

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
08/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/646,684	KELLY ET AL.
	Examiner	Art Unit	
	Mohammad A. Siddiqi	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 August 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 August 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-SB/08)
    Paper No(s)/Mail Date <u>08/29/2005, 04/02/2004</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-34 are presented for examination.

Specification

2.   The specification is objected to as failing to provide proper antecedent

basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP

§ 608.01(o). Correction of the following is required: Claim 33 and 34 recites

computer-readadable medium.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in

this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by
> another filed in the United States before the invention thereof by the applicant for patent,
> or on an international application by another who has fulfilled the requirements of
> paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by
> the applicant for patent.

4.   Claims rejected under 35 U.S.C. 102(e) as being anticipated by Rakib

et. al. (6,970,127) (hereinafter Rakib).

5.   As per claim 1, Rakib discloses a system for managing communications

between one or more on-board modules connected to one or more on-board

data links and one or more off-board systems connected to one or more off-

board data links, the system comprising:

a first on-board module connected to a first on-board data link (10,

21, fig 1, col 4, lines 41-51), wherein the on-board module and first on-

board data link are located in a work machine (28, fig 1, col 4, lines 41-64;

col 5, lines 19-31);

a first off-board system connected to a first off-board data link (14fig

1, col 4, lines 41-64; col 5, lines 19-31), wherein the off-board module is

remotely located from the work machine (15, fig 1, col 4, lines 41-64; col 5,

lines 19-31); and

a gateway embedded in the work machine including (10, fig 1, col 6,

line 40):

first and second interface (28,14, fig 1) means connecting the on-

board data links and off-board data links respectively to the gateway (28,

10, fig 1, col 6, lines 61-65),

a server application configured to perform (15, fig 1), when executed

by a processor a server process (74 fig 4) based on a server request

provided by at least one of the first on-board module (10, fig 4, col 10, lines

16-38) and the first off-board system (10, fig 4, col 10, lines 16-38), and

a communications application configured to convert a data message

(gateway, 10, fig 1) from a first format to a second format based on a type

of data link used by the gateway to transmit the data message (gateway,

10, fig 4, col 8, lines 1-11; col 10, lines 16-38),

wherein the gateway selectively executes the server and

communication applications based on a type of request received by the

gateway from one of the first on-board module and first off-board system

(10 fig 4, col 8, lines 1-11; col 10, lines 16-38, services at headend).

6.   As per claim 2, Rakib discloses the gateway includes a Web server

application configured to perform (90, fig 2), when executed by the

processor, a Web server process (90, fig 2) that provides access to a Web

page maintained in the work machine to the first off-board system (90, fig 2,

col 31, lines 8-24), and wherein the gateway selectively executes the Web

server application based on a type of request received by the gateway from

one of the first on-board module and first off-board system (90, fig 2, col

31, lines 8-24).

7.   As per claim 3, Rakib discloses the first interface means includes a

plurality of on-board data link ports each connected to respective ones of the

on-board data links including the first on-board data link (col 4, lines 54-67).

8.   As per claim 4, Rakib discloses the second interface means includes a

plurality of off-board data link ports each connected to respective ones of

the off-board data links including the first off-board data link (col 4, lines 54-

67).

9.   As per claim 5, Rakib discloses the first off-board data link is one of an

Ethernet data link, an SAE standard serial data link, a wireless radio data

link, and a wireless satellite data link (col 4, lines 54-67; col 8, lines 1-11).

10.   As per claim 6, Rakib discloses the first on-board data link is one of a

proprietary data link and an SAE standard serial data link (col 4, lines 54-67;

col 8, lines 1-11).

11.   As per claim 7, Rakib discloses the server application leverages the

communication application to convert the request from the first format to a

second format based on a type of data link used to transmit the request to a destination device (col 8, lines 1-11).

12.   As per claim 8, Rakib discloses the destination device is at one of the first on-board module and the first off-board system (10, fig 1, col 8, lines 1-11).

13.   As per claim 9, Rakib discloses the Web page includes content reflecting information associated with the work machine (90, fig 2, col 31, lines 8-24).

14.   As per claim 10, Rakib discloses the request is a Web server request received from the first off-board system and includes a query for operations data associated with the work machine (90, fig 2, col 31, lines 8-24).

15.   As per claim 11, Rakib discloses the operations data is at least one of parameter identifier information, configuration data associated with the gateway, and status information associated with an operation of the work machine (col 12, lines 1-5).

16.   As per claim 12, Rakib discloses the request is a server request

including one of: a request to push information to one of the on-board

modules (col 12, lines 1-5);

a request to push information to the gateway; a request to retrieve

information maintained in one of the gateway or one of the on-board

modules (col 12, lines 1-5);

a request to perform a configuration process associated with the work

machine (col 11, lines 10-45); and a request to send information,

maintained by one of the gateway and one of the on-board modules, to at

least one of an off-board system and a another one of the on-board modules

(col 11, lines 10-45).

17.   As per claim 13, Rakib discloses the work machine moves between, or

within, a work environment and the request is generated by a second work

machine including a second gateway that communicates with the gateway

over one of the off-board data links (col 11, lines 10-45, col 12, lines 1-5).

18.   As per claim 14, Rakib discloses the gateway is software embedded in

an on-board module that controls one or more components of the work

machine (col 11, lines 10-45, col 12, lines 1-35. downloading guide).

19.   As per claims 15-26, claims are rejected for the same reasons as

claims 1-14, above.

20.   As per claim 27, claim is rejected for the same reasons as claim 1,

above. In addition Rakib discloses method for managing communications in

an environment including a work machine having at least one on-board data

link connected to at least one on-board module and a gateway and having at

least one off-board data link connected to at least one off-board system and

the gateway, wherein the gateway maintains a Web page serviced by a Web

server application (fig 8, col 32, lines 1-16), the method performed by the

gateway comprising: receiving a request generated by a first off-board

system and transmitted on a first data link (NIC interface of the gateway, fig

8,); selectively executing the Web server application based on the request,

wherein the Web server application generates content for the Web page

based on the request and packages the content into a response message (fig

8, col 23, lines 63 to col 24 line 20); configuring the response message to a

format compatible with the first off-board system; and providing the

formatted request to the first off-board system over the first data link

message (fig 8, col 23, lines 63 to col 24 line 20), wherein the Web page

content includes information associated with the operation of the work

machine and is updatable with information received from at least one of an

on-board module and a second off-board system message (fig 8, col 23, lines 63 to col 24 line 20).

21.　As per claim 28, Rakib discloses the first off-board system executes a Web browser that generates the request and displays the content on a display device (fig 8, col 31, lines 8-24).

22.　As per claim 29, Rakib discloses receiving a request to update the content in the Web page (fig 8, col 23, lines 63 to col 24 line 20; col 31, lines 8-24); extracting information from the request; updating the content of the Web page using the extracted information; and allowing subsequent responses to subsequent requests for the Web page to include the updated content (fig 8, col 23, lines 63 to col 24 line 20; col 31, lines 8-24).

23.　As per claim 30, Rakib discloses the request to update the content is received from either one of the at least one on-board module and the at least one off-board system (fig 8, col 23, lines 63 to col 24 line 20; col 31, lines 8-24).

24.　As per claim 31, Rakib discloses the content includes at least one of work machine parameter identifier information, configuration data

associated with the gateway, and status information associated with an

operation of the work machine (fig 8, col 23, lines 63 to col 24 line 20; col

31, lines 8-24).

25.   As per claim 32, Rakib discloses the content includes work machine

parameter identification information and the request includes a query for

retrieving the parameter identification information (fig 8, col 23, lines 63 to

col 24 line 20; col 31, lines 8-24).

26.   As per claim 33, claim is rejected for the same reasons as claim 27,

above. In addition Rakib discloses wherein the server application performs a

server process; identifying a destination device associated with the request

(gateway, fig 8, col 8, lines 1-11; col 10, lines 16-38; col 23, lines 63 to col

24 line 20; col 31, lines 8-24); configuring the request to a format

compatible with the destination device (gateway, fig 8, col 8, lines 1-11; col

10, lines 16-38; col 23, lines 63 to col 24 line 20; col 31, lines 8-24);

providing the formatted request to the destination device; receiving a

response to the formatted request from the destination device; configuring

the response to a format compatible with the first data link (gateway, fig 8,

col 8, lines 1-11; col 10, lines 16-38; col 23, lines 63 to col 24 line 20; col

31, lines 8-24); and sending the response to a target device over the first

data link, wherein the first data link is either one of the on-board data links

and one of the off-board data links (gateway, fig 8, col 8, lines 1-11; col

10, lines 16-38; col 23, lines 63 to col 24 line 20; col 31, lines 8-24).

27.   As per claim 34, claim is rejected for the same reasons as claim 27,

above.

Conclusion

28.   The prior art made of record and not relied upon is considered

pertinent to applicant's disclosure:

       U.S. Patent 6,230,181
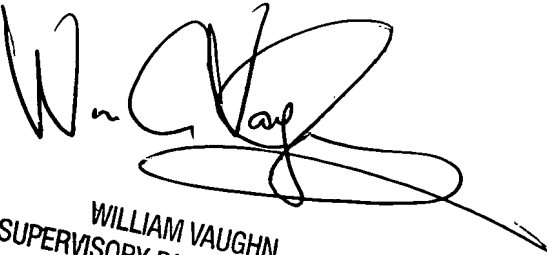
       U.S. Patent 6,479,792

Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Mohammad A. Siddiqi whose

telephone number is (571) 272-3976. The examiner can normally be

reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAS

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